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PRIVATE-SECTOR UNIONS' DECLINE IN NORTH AMERICA: A PARADIGMATIC EXPLANATION

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ABSTRACT

This paper relates one economic measure and two attitudinal measures to union membership. It then simultaneously estimates both the influence of these measures on the likelihood that a person is a union member and union membership's impact upon these measures. The implications of the results for private-sector union decline in North America support Murray and Reshef's (1988) paradigm model of union decline.

PRIVATE-SECTOR UNIONS' DECLINE IN NORTH AMERICA: A PARADIGMATIC EXPLANATION

North American private-sector trade unions are facing major organizational challenges. In 1987, only 17.0% of the U.S. labor force was unionized as opposed to one third just after World War II (Board of National Affairs [BNA], February 11, 1988). Between 1953 and 1983, although public-sector unions' density grew from 11.6% to 34.4%, private-sector unions' density declined from 35.7% to 17.8% (Troy, 1986, p. 82). In Canada during the past decade the overall level of unionization has been remarkably stable at around 38%, but this has also been due to a dramatic growth in public sector unionization compensating for losses in the private sector (Dion and Hebert, 1988). This paper attempts to explain the decline of private-sector unions in light of Murray and Reshef's (M&R, 1988) paradigm model of union decline.

A paradigm is a set of assumptions about how the world operates, how it acts and what it is made up from. These assumptions become internally consistent and are internalized by collectivities of individuals, such as unions, so that they drop from consciousness. Paradigmatic change, therefore, requires a fundamental reorientation, a change in all or at least many of the assumptions which underlie a paradigm. Such a fundamental change introduces considerable upheaval and is, therefore, unlikely to occur unless the viability of the organization is clearly threatened.

M&R have argued that the recent union decline may be attributable to unions' inability to adjust their economic paradigm to changing environments. Since their inception, North American unions have adhered to

an economic paradigm whose fundamental assumptions are that the employee-employer relationship is necessarily adversarial and that unions should pursue a narrow economic agenda. Now, being trapped in this paradigm, private-sector unions' institutions, agenda, and philosophy are out of step with a changed industrial relations reality. Because their paradigm is no longer appropriate unions are no longer effective in meeting their members' traditional economic expectations. Being unable to meet these expectations, unions have lost their major source of attractiveness to both members and potential members, hence union decline.

Taking as given that industrial relations reality in North America has changed, this paper tests whether unions still foster an adversarial view of industrial relations and how effective they are in securing real wage gains. To accurately estimate these effects, the fact that these variables also affect union membership is also taken into account. This paper, therefore, is predicated on the view that union membership constantly affects and is affected by workers' incomes and their attitudinal dispositions toward the union-management relationship.

It is noteworthy that while wage gains are by no means the only benefit unions deliver to members, they are a major one (Lewis, 1985; Dworkin et al., 1988). Hence, the ability of unions to deliver wage increases can serve as a powerful proxy for unions' capability to live up to their economic paradigm and is a major indicator of their effectiveness.

The model developed and estimated here is based on a data set gathered in the Canadian province of Alberta. Alberta is an ideal site for testing the above questions since its political-economic environment and industrial relations climate is similar to that faced by many U.S. unions.

In addition, evidence is accruing indicating that private-sector Canadian unions are following their U.S. counterparts (Reshef, 1988; Dion and Hebert, 1988). This being the case, the Alberta experience may presage changes in the rest of the Canadian industrial relations system.

POLITICAL-ECONOMIC ENVIRONMENTS OF ALBERTA UNIONS

Unlike their counterparts in Ontario, Quebec, and British Columbia, Alberta unions have been facing both a hostile polity and a severe economic recession since 1980. Plummeting demand for output from its two major industries, oil and agriculture, has boosted the level of unemployment from 3.9% in 1979, to 9.8% in 1986.

Politically, conservatism in both the government and the courts has made unionization difficult. For example, Alberta labor law contains neither a provision for settling a first collective agreement nor a provision regarding dues check-offs or technological change. A 1985 court decision granted employers the right to void expired collective agreements by locking out their employees for 25 hours. In 1986, the Alberta Labour Relations Board, interpreting the duty to bargain "in good faith", ruled that an employer must make an offer "in good faith" but is not bound to reach an agreement.

Taken together, these factors help explain why Alberta is the least unionized province in Canada; why the percentage of granted certifications has dropped from 71.8% between 1971 and 1981, to 59.1% in 1982/3, and 45.0% in 1984/5 (Kumar, Coates, and Arrowsmith, 1987, p. 380); why unionization levels have declined from 32.3% in 1983, to 31.9% in 1984, 30.9% in 1985, 29.4% in 1986, and 28.4% in 1987, well below the national level which has stayed at about 38%; and why unions could not deliver wage

increases in 1986. In that year, the Consumer Price Index rose 3.3%, yet the average annual percentage increase for all new wage settlements was only 2.5% (Alberta Labour, 1987).

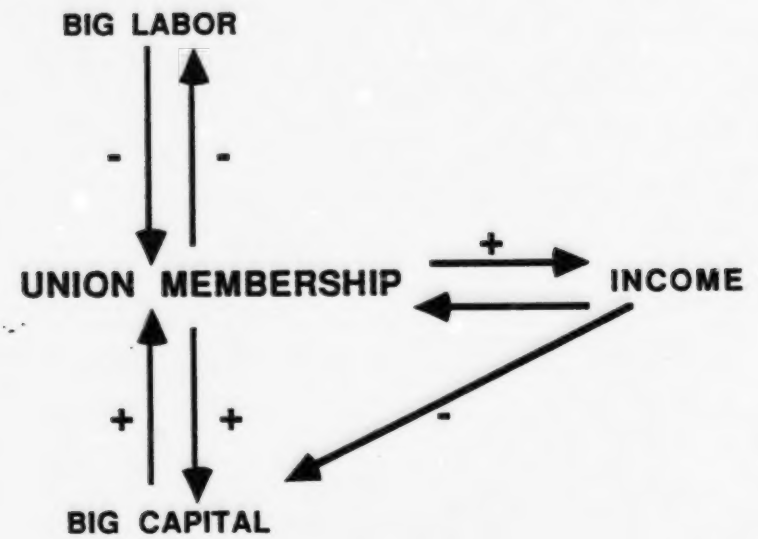
Notably, union decline in Alberta becomes much more pronounced when public/private-sector differences are taken into account. Private-sector unionization has dropped by 25%, from 16% in 1984, to 12%, in 1987 (Alberta Labour, 1985-1988). At the same time, public-sector (public administration, education services, hospitals and health care, welfare organizations, transportation, communications, and utilities) unionization has reached the remarkable level of 68%.

CONCEPTUAL FRAMEWORK AND HYPOTHESES

Figure 1 presents the model's core hypotheses which state the expected causal relations among the endogenous variables. Given that industrial relations have changed in the last decade, M&R's thesis can be tested by examining whether unions cling to the economic paradigm and how effective they are in improving members' income. This is done by testing the effects of union membership on worker attitudes toward the union-management relationship and by examining union membership's effect on workers' income. As mentioned above, to obtain accurate estimates of these relationships the effects of these variables on union membership must also be considered.

The effect of union membership on attitudes toward unions and employers. In order to strengthen organizational solidarity, especially in times of economic hardships, union leaders and members must share the same understanding, perspective, and interpretation of reality. To realize this unions like other organizations need a common culture into which all

FIGURE 1: THE CORE HYPOTHESES



members are socialized. According to M&R, if unions cling to an economic paradigm they will reinforce the belief that employers' power must be constrained by a countervailing force to prevent worker exploitation. At the same time, obviously, unions should maintain the notion among their members that they have not become so powerful that economic stability is jeopardized. Indeed, Chacko and Greer (1982) have found that nonunion members have stronger perceptions that unions are stronger than employers while Lowe and Krahn (forthcoming) have demonstrated that union membership produces sentiments against a big-labor image and pro big-capital image. Hence, if unions still adhere to the economic paradigm,

H1: organizing a group of workers will result in these workers on average holding weaker big-labor sentiments than previously

and,

H2: organizing a group of workers will result in these workers on average holding stronger big-capital sentiments than previously.

The effect of attitudes toward unions and employers on union membership. The decision whether to join a union depends partly on a worker's world view -- that set of beliefs on how the world operates, what is right and wrong, what is fair and unfair, and the degree to which one controls one's life. Two particularly relevant sets of beliefs concern the nature of industrial relations are: (a) Big Capital -- the notion that unions are essential to balance the power of employers and improve workers' working conditions, and (b) Big Labor -- the notion that unions are too powerful an institution in society and that their power must be limited.

The big-capital belief is an offspring of the "business unionism"

philosophy. Here, unions are perceived to be essential to counter powerful and selfish employers and improve their members' economic conditions. In contrast the big-labor belief asserts that unions are too powerful, that they impose too many restrictions on employers, and that to improve production efficiency union power must be limited. It has been found that those who hold beliefs that unions are too powerful are less prone to support and join unions, while those who believe that employer power can only be countered by unions are more prone to support and join unions (Kochan, 1979; Chacko and Greer, 1982; Zalensy, 1985; Gordon and Long, 1981; Le Louran, 1980; Schriesheim, 1978; Klandermans, 1986).

Moreover, most current union members will not be new members and will, if H1 and H2 are correct, have been socialized into the economic paradigm, specifically, in this case, into the adversarial view of the union-management relationship.

Due to both of the arguments expressed above,

H3: the greater a worker's big-labor beliefs the smaller the likelihood the worker is a union member and,

H4: the greater a worker's big-capital beliefs the greater the likelihood the worker is a union member.

The effect of union membership on income. Economically disadvantaged workers are more likely to be union members because they expect unions to help reverse their situation. This belief has considerable empirical support. In the U.S., unionized workers earn higher incomes than nonunionized workers (Freeman and Medoff, 1984, p. 46; Kochan, Katz, and McKersie, 1986, pp. 103-4). And in Canada, the most recent Labour Market Activity Survey conducted by Statistics Canada shows that indeed, as in

the U.S., union workers earn higher wages than nonunion workers. In 1986, when the national average hourly wage was $11.48, union workers earned $13.29, and nonunion workers earned $10.29. The same pattern applied to full-time ($11.71 - $13.34 - $10.59) and part-time ($8.69 - $12.41 - $7.42) and for male ($12.80 - $14.05 - $11.84) and female workers ($9.52 - $11.91 - $8.23). While it is not clear whether the magnitude of these wage differentials are totally due to the union effect, both Canadian (Maki and Christensen, 1980; Christensen and Maki, 1981; Robinson and Tomes, 1984; Gunderson and Riddel, 1988, pp. 303-39) and U.S. researchers (Lee, 1978; Freeman and Medoff, 1984; Hirsch and Addison, 1986; Lewis, 1986) concurred that, by and large, unions have a positive effect on their members' wages.

Thus although significant differences exist in union wage effects among demographic groups and across regions,

H5: organizing a group of workers will result in these workers on average earning higher incomes than previously.

This traditional hypothesis contradicts M&R who argue that now unions are no longer effective in delivering wage gains. If M&R are correct H5 will not be supported.

The effect of income on union membership. It is a highly consistent finding that workers who are more dissatisfied with the economic aspects of their job or those who report more problems with these aspects are more likely to seek unionization (Schreisheim, 1978; Kochan, 1979; Le Louran, 1980; Gordon and Long, 1981; Maxey and Mohrman, 1980; Smith and Hopkins, 1979; Farber and Saks, 1980; Farber, 1987). However, we are not examining propensity to join a union but union membership per se.

In our sample, therefore, union members may belong to either of two

groups. They may have recently joined unions in the expectation of improving their economic situation. Or, they may have been union members for sometime. If union membership comprises only the first group it would be reasonable to posit a negative effect of income on union membership, meaning that the lower a worker's income the higher the likelihood that the worker is a union member. However, considerable evidence, cited below, has shown that in the past unions have improved their members' income. If union membership comprises only the "veteran" group it would be reasonable to posit a positive effect of income on union membership, meaning that the higher a worker's income the higher the likelihood that the worker is a union members. Since we are not able to control for a worker's tenure as a union member we cannot predict the direction of the effect of income on union membership.

The effect of income on attitudes toward employers. A final hypothesis concerns the relationship between income and big-capital beliefs. Due to a lack of prior work in this area there is no evidence about this relationship. It is, however, logical to assume that high-income workers, who benefit from the existing socio-economic order, are less likely to be critical of it. Hence,

H6: that the higher a worker's income the weaker the worker's big-capital beliefs.

METHODS

Sources of Data

This study's data are part of the All Alberta Study (AAS87) conducted in 1987 by the Population Research Laboratory at the University of

Alberta. The 1045-subject sample was randomly selected (see Kinzel, 1987 for sampling methods). Face-to-face interviewing was conducted in the City of Edmonton while telephone interviewing was conducted for all other areas of Alberta. The questions asked were the same in all cases.

The sample is representative of the population of Alberta (2,365,825) on most demographic dimensions. Out of 1045 subjects, 49.1% are male and 50.9% are female. A respondent's average age is 41.14 years (and the range is from 18 to 94) and, on average, she/he has 12.75 years of education. At the time of the survey, 54.8% of the respondents were employed full-time, 28% were employed by the public-sector and, on average, a respondent's income was between $30,000 and $30,999 before taxes were deducted.

Variables and Measurements

The full model presented in Figure 2 contains, in addition to the endogenous variables discussed above, all the control variables and their hypothesized relationships with the endogenous variables. This model takes the following form:

(I) $\text{UNION MEMBERSHIP} = G_{11}\text{SECTOR} + G_{12}\text{EMPLOYMENT} + B_{11}\text{INCOME} + B_{12}\text{BIGCAPITAL} - B_{13}\text{BIGLABOR} + Z,$

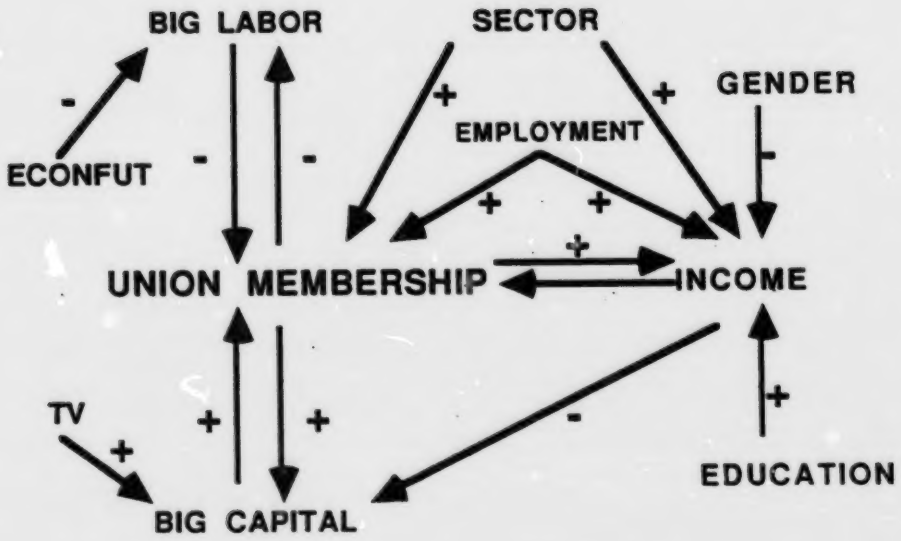
(II) $\text{INCOME} = -G_{21}\text{GENDER} + G_{22}\text{EDUCATION} + G_{23}\text{SECTOR} + G_{24}\text{EMPLOYMENT} + B_{21}\text{UNION MEMBERSHIP} + Z,$

(III) $\text{BIGLABOR} = -G_{31}\text{ECONFUT} - B_{31}\text{UNION MEMBERSHIP} + Z,$

(IV) $\text{BIGCAPITAL} = G_{41}\text{TV} + B_{41}\text{UNION MEMBERSHIP} - B_{42}\text{INCOME} + Z,$

where a B (BETA) represents an effect of one endogenous variable on another endogenous variable, a G (GAMMA) represents an effect of one exogenous variable on an endogenous variable, and a Z (ZETA) is an error term.

FIGURE 2: THE THEORETICAL MODEL



ENDOGENOUS VARIABLES.

UNION MEMBERSHIP is a dichotomous variable measuring whether a respondent is a union member (1=yes; 0=no). One hundred and sixty seven (16% of the sample) respondents were unionized.

INCOME is a continuous variable measuring the income of a respondent before taxes were deducted, in 1986. There are 26 categories starting with "under $6,000" and, advancing in $2,000 increments, ending with "$75,000+".

BIG LABOR comprises two Likert-type items ranging from 1 (strongly disagree) to 7 (strongly agree): (1) "We need more laws to limit the powers of unions"; (2) "Unions impose too many restrictions on employers".

BIG CAPITAL comprises four Likert-type items ranging from 1 (strongly disagree) to 7 (strongly agree): (1) "Employees of an organization have better wages and working conditions when all of them belong to unions"; (2) "During a strike, management should be prohibited by law from hiring workers to take the place of strikers"; (3) "The selfishness of employers can be fought only by strong unions"; (4) "We need more laws to limit the power of employers in dealing with unions".

CONTROL VARIABLES.

EMPLOYMENT is a dichotomous variable measuring whether a respondent is a full- or part-time employee (1=full-time; 0=part-time). In Canada in 1986 a much smaller proportion of part-timers (16.6%) were organized than paid full-timers (32.8%) (Statistics Canada, 1988a). Being frequently casual workers, "[p]art-time workers have always been the neglected step-children of the labor force -- relegated to low-paying jobs, denied

access to fringe benefits, rarely promoted, and generally ignored by human resource managers" (Wallace, 1986, p. 15,519). Consequently, in 1986 the average hourly wage of a part-timer was $8.69 compared with a full-timer's hourly average of $11.71 and a national hourly average of $11.48 (Statistics Canada, 1988a).

In Canada, 88 percent of union members (Statistics Canada, 1986a) are full-time employees. While unions appear to welcome part-timers in certain professions such as teaching, nursing, and social work, they either do not pursue part-timers located in low-paying (i.e., sales, service, and primary occupations) jobs or, have difficulty attracting them (Wallace, 1983, pp. 95-6). We therefore expect EMPLOYMENT to positively affect UNION MEMBERSHIP and INCOME.

GENDER is a dichotomous variable where 1=female and 0=male. During the past decade, the increasing number of women in the workforce has significantly affected the structure of the Canadian labor force. Since 1980, women have been entering the labor market in record numbers. In 1981-1986, women accounted for 75% of the growth in the labor force and filled 94% of additional jobs. The number of women in the workfoce increased by 46% from 1975 to 1985 (Statistics Canada, 1988b), and in 1986, the 6.8 million women who worked in Canada comprised 45.5% of the total national workforce (Statistics Canada, 1988a).

In 1986, 60% of the female workers, 4.1 million, worked in the low-paying service, sales, and clerical occupations, where their respective average hourly wages were $6.43, $7.65, and $9.03 -- much below the $9.52 average for female employees and the national hourly average of $11.48 (Statistics Canada, 1988a). Furthermore, while most Canadian men (86%) worked full time, almost a third (31.1%) of all female workers

worked only part-time (less than 30 hours per week). As a result, women made up 66% of all part-time workers in Canada. We therefore expect GENDER to negatively affect INCOME.

EDUCATION is a continuous variable measuring a respondent's years of education. We, obviously, expect EDUCATION to positively affect INCOME.

SECTOR is a dichotomous variable measuring whether a respondent is employed by the public sector or not (1=yes; 0=no). Since the late 1960s, Canadian public-sector employees have been allowed to join unions, engage in collective bargaining, and even to strike in six jurisdictions including the Federal. In 1986, in Alberta, 68% of all employees in the public sector were unionized, and comprised 70.9% of the total union membership (Alberta Labour, 1987a). In our sample, 107 out of 166 union workers (64.3%) were employed in the public sector. We control for the impact of SECTOR on INCOME since, in Canada, public-sector employees earn above the national hourly average -- $13.77 in public administration, $15.53 in teaching, $12.43 in medicine, and $16.27 in transportation, communication and utilities compared with a national average of $11.48 (Statistics Canada, 1988a). We, therefore, expect that SECTOR positively affects UNION MEMBERSHIP and INCOME.

ECONFUT is a scale measuring a respondent's perceived economic future -- "Now looking ahead - do you think that a year from now you (and your family), will be better off financially, or worse off, or just about the same as now?" The scale ranges from 1 (better now) to 3 (will be worse off). Prior research has found that those who expect to be worse off in the near future are more likely to support trade unions (Kochan, 1979; Farber and Saks, 1980: Lowe and Krahn, 1988). We, therefore, expect ECONFUT to negatively affect BIG LABOR.

TV (television viewing) is a continuous variable measuring the hours a respondent watched television in the past week. It is noteworthy, that, in Alberta, the summer of 1986 -- labelled "the summer of discontent" -- was characterized by an unusually high number of violent strikes whose television coverage was sympathetic to workers (Noel and Gardner, 1988; Panitch and Swartz, 1988, p. 80). We, therefore, expect TV to positively affect BIG CAPITAL.

Data Analysis

The model is estimated using the LISREL 6 program which is a full-information maximum-likelihood estimator. LISREL allows one to specify theoretical or latent factors when multiple indicators are present and when non-recursive causal relationships are hypothesized. It provides several indicators of goodness-of-fit to determine the extent to which the estimated parameters can reproduce the original input correlation matrix.

When a correlation rather than a covariance matrix is the input to the program (Joreskog and Sorbom, 1984, p. I-39) and when the sample size is greater than 200 cases (Hayduk, 1987, p. 168), as is the current case, the quality of the model's fit should be assessed by examining the residual covariances[1] and by running several models with different restrictions and selecting the one with the smaller X^2 (Hayduk, 1987, pp. 169-173). A smaller X^2 implies that the model predicts a correlation matrix that more closely matches the matrix actually obtained.

RESULTS

Table 1 reports the correlation matrix which is the input to the program[2].

TABLE 1

CORRELATIONS, MEANS AND STANDARD DEVIATIONS

OF VARIABLES IN THE MODEL

VARIABLES	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Biglabor1														
2. Biglabor2	.50													
3. Bigcapital1	-.17	-.14												
4. Bigcapital2	-.31	-.32	.29											
5. Bigcapital3	-.24	-.23	.42	.42										
6. Bigcapital4	-.08	-.15	.23	.35	.38									
7. Unionmember	-.25	-.20	.18	.19	.12	.05								
8. Income	.02	.05	-.18	-.10	-.07	-.19	.12							
9. Econfut	-.12	-.12	.09	.04	.05	.02	-.01	-.07						
10. TV	.04	-.04	.11	.18	.14	.11	-.05	-.24	.08					
11. Education	-.06	-.03	-.06	-.07	-.10	-.10	.14	.30	-.03	-.28				
12. Employment	-.06	.03	-.10	-.05	-.10	-.09	.22	.36	-.11	-.22	.24			
13. Gender	.06	-.06	.02	.07	.07	.08	-.07	-.17	.02	.03	-.07	-.29		
14. Sector	-.09	-.13	.06	.12	.06	.06	.36	.10	.12	-.03	.25	-.03	.22	
MEAN	4.56	4.68	4.34	3.84	3.60	3.78	.19	14.70	1.66	14.08	13.08	.55	.45	.31
SD	2.06	1.85	1.95	2.41	1.98	1.80	.40	7.35	.64	12.87	2.95	.50	.50	.46

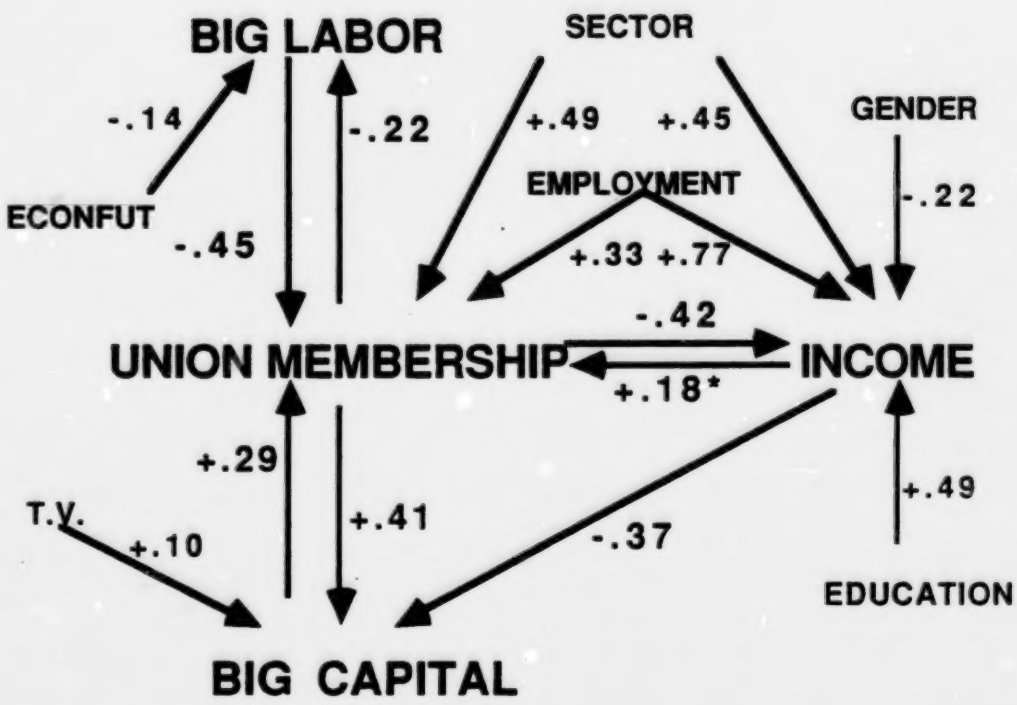
The model demonstrated in Figure 3 is a standardized solution, presented to facilitate the interpretation of the results[3]. This model had the smallest X^2 (125.88 with 55 df) of the several models we estimated. Most importantly, throughout the runs the core model (Figure 1) remained intact. The results support five of the hypotheses.

The effect of UNION MEMBERSHIP on attitudes toward unions and employers. From the effect of UNION MEMBERSHIP on BIG LABOR (-.22) it appears that, as predicted, union members agree less with big-labor statements than nonmembers. The positive strong effect of UNION MEMBERSHIP on BIG CAPITAL (.41) indicates that, as predicted, union members agree more with big-capital statements than nonmembers. Put differently, union members tend to agree more with big-capital and less with big-union statements than nonmembers and these differences, as are shown below, are enhanced by union membership.

The effect of attitudes toward unions and employers on UNION MEMBERSHIP. The, predicted, negative effect of BIG LABOR on UNION MEMBERSHIP (-.45) suggests that the higher the big-labor beliefs held by workers the less likely they are to be union members. The opposite is true for big-capital beliefs. The positive effect of BIG CAPITAL on UNION MEMBERSHIP (.29) means that the higher the big-capital beliefs held by workers the more likely they are to be union members.

The effect of INCOME on UNION MEMBERSHIP. We found a positive, although only moderately significant, effect of INCOME on UNION MEMBERSHIP (.18). This suggests that most members in our sample had been union members for some time and had benefited from that membership. Note, however, that this is only the direct effect of INCOME on UNION

FIGURE 3: THE EMPIRICAL MODEL



Notes: A standardized solution.
*P=12 (two-tailed test).
P<.01 for all other coefficients (one- or two-tailed test as appropriate).

X^2 =125.88 df=55 N=781

MEMBERSHIP. When the indirect effect of INCOME on UNION MEMBERSHIP (through the effect INCOME has on BIG CAPITAL) is taken into account INCOME's total effect is only .07. This means that in our sample the union wage differential is low and thus cannnot effectively predict union membership. One surprising explanation for this finding is provided below.

The effect of UNION MEMBERSHIP on INCOME. Traditional views hypothesize a positive effect of UNION MEMBERSHIP on INCOME. Our analysis resulted in a negative effect. This result coupled with the result described above implies that union workers in Alberta may be giving back financial gains achieved in the past.

The effect of INCOME on attitudes toward employers. As expected, INCOME affects strongly and negatively (-.37) worker sentiments toward employers as reflected by BIG CAPITAL statements. High-income workers may be satisfied with the socio-economic system and feel no desire to limit the power of employers. Or, they may be dissatisfied with it but not view unions as the appropriate agents of change.

DISCUSSION

M&R's argument explains union decline as the inevitable result of poor performance by unions which are unable to adjust their paradigm to a changed environment. That the industrial relations environment has changed in the last decade is now indisputable. Equally indisputable is the evidence of union decline. To test M&R's thesis, then, it is necessary to establish that unions cling to the economic paradigm and that they are no longer effective in enacting it.

To recapitulate our main findings, union membership was found to attenuate big-labor beliefs and reinforce big-capital beliefs, both as

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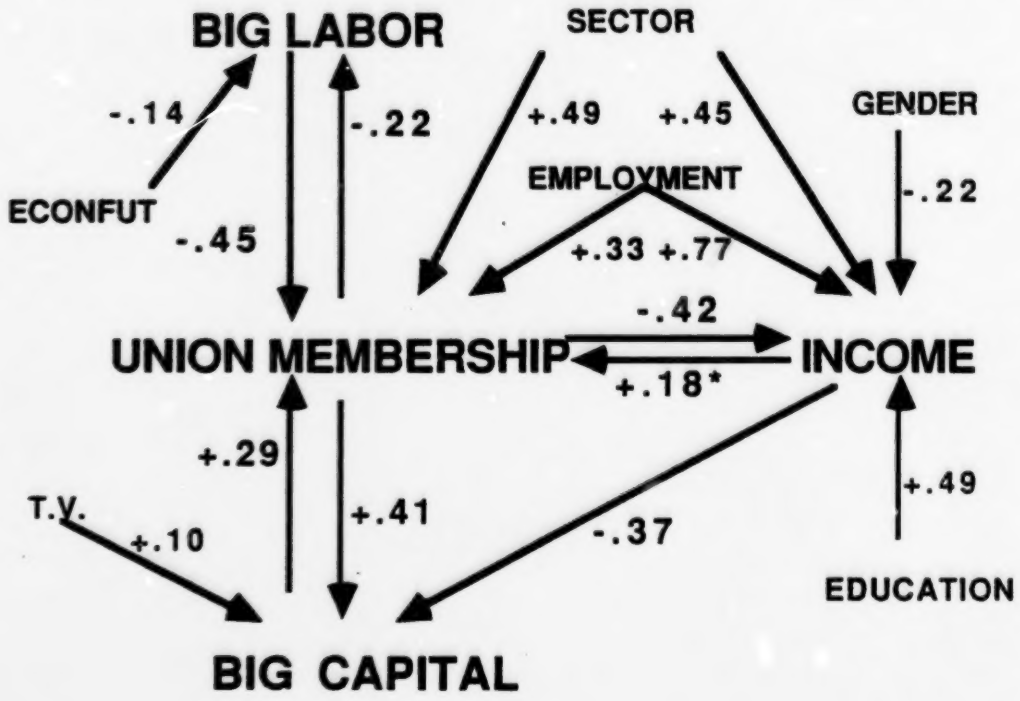

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To recapitulate our main findings, union membership was found to attenuate big-labor beliefs and reinforce big-capital beliefs, both as

predicted. Also, workers holding big-labor beliefs were less likely to be union members and workers with stronger big-capital beliefs were more likely to be union members. Both of these results were as predicted. Effective socialization of union members to an adversarial view toward the union-management relationship, thus, enhanced and was enhanced by the effects of this view on union membership. What we are observing here, then, is a positive enhancement loop. The union collectivity and the individual members of whom it is composed constrain each other and thus dramatically strengthening the economic paradigm's inertia.

The relationships between union membership and income deviated in part from the traditional patterns. First, we found that workers with higher incomes were more likely to be union members. Had a full information approach to parameter estimation not been employed it would be reasonable to conclude that this result was merely an artifact resulting from union relative avoidance of part-timers and their successful pursuit of public-sector employees. But, the estimates we report here are based on a full-information causal model in which these independent effects are already estimated and thereby "partialled out". Second, unlike our prediction, union membership negatively affected member incomes.

While the negative effect of UNION MEMBERSHIP on INCOME may be sample specific, and while we are familiar with only one study (MacDonald and Evans, 1981) where Canadian semi-skilled workers suffered wage losses from union coverage, there is a growing evidence that in both the U.S. (Bernstein, 1986; The Economist, February 14, 1987, pp. 23-7; Freeman and Kleiner, 1988; BNA, June 30, 1988) and Canada (Adams and Saul, 1988; Hryciuk, 1987; Panitch and Swartz, 1988, p. 100) the union wage effect is becoming less positive than it once was.

The relationship between unions' growing difficulties to deliver real wage gains and to adjust their industrial relations view to a changed reality and union decline provides support to M&R's paradigm thesis of union decline. During the past decade, thus, a tension has developed between union members' expectations, the product of beliefs inculcated in members by union leaders, and unions' ability to meet these expectations. Union members continue to believe that they are caught in a hostile work environment in which unions are their only hope. But, growing difficulties to "deliver the goods" due to radically transformed environments may have attenuated the validity of that notion and reduced unions' attractiveness to members and nonmembers alike. Union decline may have been one result of this tension.

In a more speculative vein, the economic paradigm of U.S. unions may become even more self-contradictory with the spread of concession bargaining and the growth of "commitment-maximizing" (Lincoln and Kalleberg, 1985) organizations focusing on worker-management integration and harmonious interdependence. Concession bargaining may attenuate the validity of the economic paradigm in two ways: First, affected workers have suffered long-term wage losses for the first time in decades. Second, by giving prominence to job security over income, concession bargaining may have increased workers' commitment to and stake in the competitiveness of their company, thereby rendering the notion of adversarial industrial relations less valid. These effects may have been strengthened with the advent of a new model of human resource management.

To cope with mounting competitive pressures, many U.S. firms have been trying to improve product quality and cut labor costs by supplying workers with nonmonetary benefits, mostly higher, although by all means

conditional, job security and greater say at the point of production. By so doing, firms have strengthened the worker-company bond, thereby reducing worker motivation to join unions in the nonunion sector (Cornfield, 1986; Farber, 1987; Garbarino, 1984; Foulkes, 1981; Shaiken, Herzenberg, and Kuhn, 1986; Kochan, Katz, and McKersie, 1986, pp. 52, 79), and challenging union internal integration and job regulatory institutions in the union sector (Verma and McKersie, 1987; Katz, 1985).

In Canada, where concession bargaining has been less prevalent, workers have seen their income shrinking without any negotiated improvement in job security (Stinson, 1988; Slotnick, 1987). In addition, there is evidence that some employers have adopted the new model of human resource management (Reshef, 1988). It is not unreasonable to believe that in the near future, more employers faced with growing foreign and domestic competitive pressures, resulting from deregulation, privatization, and the recent Free-Trade Agreement with the U.S., will be compelled to follow their U.S. counterparts' industrial relations practices.

The results presented here provide, in the microcosm of Alberta, contribute evidence that unions, facing difficulties to satisfy their members' income expectations, yet nurturing such expectations by pursuing an adversarial view of industrial relations, are bearing the brunt of not responding to a changing reality. Union decline, this paper has thus argued, has been facilitated not simply by unions' inability to deliver wage gains, but by the tension between their paradigm and that inability.

NOTES

1. Residuals greater than +2.0 or less than -2.0 imply nonrandom error variance. LISREL, however, allows flexibility in the specification of the error terms so that correlated errors can be specified. Correlated errors indicate that not all the variation in responses can be accounted for by one underlying construct plus random error. By correlating error terms, systematic error variance which is due to the effect of excluded variables is accounted for and partialled out. Whereas the specific correlations among error terms are not of interest in themselves, their incorporation into the model provides more precise estimates of the parameters.

2. This correlation matrix is based on pairwise deletion of missing cases. The number of observations reported here and in Figure 3 (N=781), therefore, is a conservative figure denoting the minimum N for any correlation in this matrix. Note, that only three correlations are based on less than 799 observations and 10 on less than 900 observations. On the other hand, 78 correlations are based on more than 900 observations. The decision to use the pairwise rather than the listwise matrix is based on a twofold consideration: First, the listwise deletion of missing cases has reduced the sample size by 32.4%, to 706 cases. Second, the listwise deletion of missing cases has resulted in a "stability index" greater than 1 (1.003) which indicates at least one inflated B estimate (Hayduk, 1987, pp. 271, 274). The pairwise matrix, on the other hand, has produced a smaller and acceptable index value (.826).

We, however, ran the model twice using a different correlation matrix each time. The only significant difference involves the effect of INCOME on UNION MEMBERSHIP. While it was highly significant ($p<.05$) and

relatively strong (.32) when the listwise matrix was used as the input to the program, it became less significant (p=.12) and weaker (.18) when the pairwise matrix was used.

3. We omitted the measurement model and correlations among exogenous variables for diagrammatic simplicity. The full model including these estimates is available from the authors. We have, however, confirmed the structure of the two multiple-indicator factors -- BIG LABOR and BIG CAPITAL -- before running the full model. The item loadings are: Biglabor1 - .79; Biglabor2 - .64; Bigcapital1 - .54; Bigcapital2 - .59; Bigcapital3 - .72; Bigcapital4 - .52. The order of the items corresponds to what appears on page 10.

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